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Illinois
Environmental
Protection Agency

Division of Public Water Supplies
2200 Churchill Road
Springfield, Illinois 62706

27957 Fil

Groundwater Quality Protection Program

WEST LIBERTY-DUNDAS WATER DISTRICT
FACILITY NUMBER 1595050
WELL SITE SURVEY
REPORT

Division of Public Water Supplies

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GROUNDWATER QUALITY PROTECTION PROGRAM:

WEST LIBERTY-DUNDAS WATER DISTRICT
FACILITY NUMBER 1595050
WELL SITE SURVEY
REPORT

Prepared by:

Division of Public Water Supplies

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TABLE OF CONTENTS

I. Introduction

II. Facility Description and Geologic Profile of Well Sites

III. Groundwater Sampling and Monitoring History

IV. Well Site Survey Methods and Procedures

V. Summary

VI. Recommendations

VII. Technical Appendices

A. Topographic Map

B. Aerial Photographic Map

West Liberty-Dundas WD Well 1 (IEPA #71200) Summary Description, Well Log and Unit Inventory

West Liberty-Dundas WD Well 2 (IEPA #71201) Summary Description, Well Log and Unit Inventory

West Liberty-Dundas WD Well 3 (IEPA #71202) Summary Description, Well Log and Unit Inventory

West Liberty-Dundas WD Well 4 (IEPA #71203) Summary Description, Well Log and Unit Inventory

C. Facility Wells Report

D. Detailed Sampling/Monitoring Results

E. Hazard Review Worksheet

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INTRODUCTION

This report has been prepared by the Agency pursuant to Section 17.1 of the Illinois Environmental Protection Act. The report summarizes information about your facility and samples collected and analyzed from your well(s). The well site survey provides an inventory of the area around the well(s) to help increase your awareness of potential hazards to groundwater utilized by your facility. This information and technical data will assist you in developing and implementing local groundwater protection measures authorized by the Act.

FACILITY DESCRIPTION AND GEOLOGIC PROFILE OF WELL SITES

The West Liberty-Dundas Water District utilizes four public water supply (PWS) wells. Well 1 (IEPA 71200) and Well 3 (IEPA 71202) are located east of the water treatment plant. Well 2 (IEPA 71201) and Well 4 (IEPA 71203) are located west of the water treatment plant. All four PWS wells are located in wooded areas with dense secondary growth. The water treatment plant is located approximately 1/2 miles north of Olney, and close to 80 feet west of Illinois State route 130. The facility supplies around 22,000 gallons per day to 190 service connections (roughly a population of 494 people).

The PWS wells utilize Pennsylvanian bedrock aquifer(s) of sandstone and possibly fractured limestone. The surficial geologic susceptability (permeability) rating for the wells is G. The Illinois State Geological Survey defines a susceptability rating of G as relatively impermeable bedrock within 20 to 50 feet of surface, overlain by till or other fine-grained materials. Permeability is a measure of the ability of a soil or sediment to transmit fluids. The potential for contamination is very low in these areas. The direction of groundwater flow in this area is possibly to the south. A detailed description and geologic profile can be found in Appendix B and C. Table I describes the well as follows:

Table I

	Minimum Setback (ft.)	Maximum Setback (ft.)	Status	Capacity (gpm) (MGD)	Specific Capacity (gpm/ft.)	Treatment	Aquifer	Well Depth (ft.)	Well Logs Available
Well 1 (71200)	200	-	A	- .015	.01	Cl., Fl.	Penn.ss Bedrock	174	Y
Well 2 (71201)	200	-	A	- .011	.01	Cl., Fl.	Penn.ss Bedrock	168	Y
Well 3 (71202)	200	-	A	- .008	.1	Cl., Fl.	Penn.ss Bedrock	170	Y
Well 4 (71203)	200	-	A	- .007	.1	Cl., Fl.	Penn.ss Bedrock	200	Y

A - Active

GROUNDWATER SAMPLING AND MONITORING HISTORY

West Liberty-Dundas Wtr. Dist. Wells 1, 2, 3, 4 were sampled on March 7, 1983 by Leroy Eagleson as part of a Statewide Groundwater Monitoring Program. At this time the wells were sampled and analyzed for inorganic chemicals (IOC). Additionally, Well 3 was sampled and analyzed by the Agency on October 27, 1987 for inorganic chemicals and volatile organic aromatic compounds (VOC/VOA).

VOC/VOA analysis of well 3 did not detect quantifiable levels of volatile organic/aromatic compounds. Inorganic analysis performed for wells 1, 2 and 4 indicated parameters are consistant with other aquifers of this type within the area. However, IOC analysis of well 3 detected arsenic at 62 parts per billion (ppb) which is above the drinking water maximum contamination level of 50 ppb. Additional sampling of well 3 on 10/27/87 indicated arsenic at 1 ppb, which is below the MCL. For a detailed sampling and monitoring history refer to Appendix D.

WELL SITE SURVEY METHODS AND PROCEDURES

The detailed well site survey consists of an aerial photographic map and inventory sheets (Appendix B), that relate information about potential sources, routes, and possible problem sites to your water supply wells. The location of potential sources, routes, possible problem sites, water wells minimum setback zones and the 1,000 foot survey area are all displayed on the aerial photographic map.

The first page of each survey consists of a summary description and geologic profile for each well. The second and following pages of the survey inventory units within and bordering a 1,000 foot radius of the wellhead. A unit is defined as any device, mechanism, equipment, or area (exclusive of land utilized only for agricultural production). The Agency 5-digit well number is associated with a unit or map code, and then classified. The classification codes relate to definitions of potential contamination sources and routes as defined in the Illinois Groundwater Protection Act (see Groundwater Primer pages 18-19). The distance and direction of the unit from the wellhead is also indicated.

Survey Results and Findings

West Liberty-Dundas Water District well site field survey was conducted on September 9, 1992 by Carl Kamp, Environmental Protection Specialist, from the Agency's Springfield Office. Mr. Kamp interviewed Cari Sanders (and husband), operator for the community water supply. The following describes the results and findings for the facility.

West Liberty-Dundas Water District Well 1 (71200)

The well site survey area is mostly rural. The survey area is a mixture of row crops, woodland and pasture. The remaining area is low density residential and open space. Residents of the area appear to use single dwelling septic tank systems. No potential primary or secondary sources, routes or possible problem sties were located within the minimum setback zone of 200 feet or the remainder of the survey area. Residential dwellings within the wellsite survey area possibly use separate potable water supply wells.

West Liberty-Dundas Water District Well 2 (71201)

The well site survey area is mostly rural. The survey area is a mixture of row crops, woodland and pasture. The remaining area is low density residential and open space. Residents of the area appear to use single dwelling septic tank systems. No potential primary or secondary sources, routes or possible problem sties were located within the minimum setback zone of 200 feet or the remainder of the survey area. Residential dwellings within the wellsite survey area possibly use separate potable water supply wells.

West Liberty-Dundas Water District Well 3 (71202)

The well site survey area is mostly rural. The survey area is a mixture of row crops, woodland and pasture. The remaining area is low density residential and open space. Residents of the area appear to use single dwelling septic tank systems. No potential primary or secondary sources, routes or possible problem sties were located within the minimum setback zone of 200 feet or the remainder of the survey area. Residential dwellings within the wellsite survey area possibly use separate potable water supply wells.

West Liberty-Dundas Water District Well 4 (71203)

The well site survey area is mostly rural. The survey area is a mixture of row crops, woodland and pasture. The remaining area is low density residential and open space. Residents of the area appear to use single dwelling septic tank systems. No potential primary or secondary sources, routes or possible problem sties were located within the minimum setback zone of 200 feet or the remainder of the survey area. Residential dwellings within the wellsite survey area possibly use separate potable water supply wells.

SUMMARY

The wellsite survey conducted indicates that there were no possible problem sites located within the rural survey areas of the four public water supply wells. Sampling and monitoring performed detected no contamination in the groundwater utilized by wells 1, 2 and 4. However, an initial sampling of well 3 found arsenic to be above the maximum contaminate level. Followup sampling of well 3 reported a normal level of arsenic. Residents within the wellsite survey areas possibly use private potable wells and septic systems (abandoned wells should be properly plugged in accordance to the Illinois Water Well Construct Code).

RECOMMENDATIONS

The Illinois Environmental Protection Act provides minimum protection zones for your wells. These minimum protection zones are regulated by the IEPA. The Act also authorizes county and municipal officials the opportunity to provide maximum protection zones up to 1,000 feet. The responsibility for the controls would then be assumed by local officials through adoption of a maximum setback zone ordinance.

The West Liberty-Dundas Water District is presently in an ideal situation; no potential primary sources within the well site survey area. Establishing a maximum setback zone would prohibit the siting of new potential primary sources of groundwater contamination to a distance of 1,000 feet from the wellhead and allow additional future protection to the community water supply. In addition, a maximum setback zone could expand the regulatory coverage of certain new and existing activities.

The Agency strongly urges West Liberty-Dundas Water District to consider establishing maximum setback zones for its wells. The Agency has prepared a "Maximum Setback Zone Workbook" which provides detailed case studies of how to establish a maximum setback zone. Technical assistance is available from the Agency and the Illinois State Water Survey.

TECHNICAL APPENDICES

APPENDIX A - Topographic Map of West Liberty-Dundas Water District (1595050) Well Locations

APPENDIX B
Aerial Photographic Map

INITIAL
12/31/92

APPENDIX B
Aerial Photographic Map

INITIAL
12/31/92

7:201 7:1203 71200 7:202

A

R

A

R

LAKE

A

R

A

200'

WTP

200'

200'

CREEK

A

1,000'

R

1,500

130

NORTH
SCALE: 1"=40
PROPERTY-DUNDAS WTP, DIST.
159505

APPENDIX: B1 WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE West Liberty-Dundas Water District Well 1 (IEPA - 71200)

SURVEYOR: C. Kamp
SURVEY DATE: September 9, 1992

ADDRESS:
Everette Gaede, President
Box 343
West Liberty, IL 62475

AGENCY WELL NO: 71200
WELL NAME & DESC.: Well 1-Located N.E. of WTP
TREATMENT APPLICATION POINT: 01
FACILITY NO. & NAME: 1595050-West Liberty-Dundas Water District
FAC. PHONE NUMBER: None
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
04N, 10E, 15, 8E
DISTANCE FROM CORNER: 2540S, 100E
QUAD SHEET CODE & NAME: 213D-Dundas
MIN. SETBACK: 200 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: G-relatively impermeable bedrock within 20 to 50 ft of surface, overlain by till or other fine-grained materials
AGE OF WELL (DATE WELL CONSTRUCTION): 1968
WELL DEPTH: 174 ft.
CASEMENT DEPTH: 65 ft.
AQUIFER CODE: 2020
MULTIPLE AQUIFER (Y, N): N
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The well site survey area is mostly rural. The survey area is a mixture of row crops, woodland and pasture. The remaining area is low density residential and open space.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:
Cari Sanders, W. Liberty-Dundas Water District, 217 W. Bryan Street, Herrin, IL 62948

White Copy – Ill. Dept. of P : Health
Yellow Copy – We.. Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUES AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

1/67

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material _____. Buried Slab: Yes_____No_____
   b. Driven _____. Drive Pipe Diam.____in. Depth _____ft.
   c. Drilled _____. Finished in Drift _____. In Rock _____.
   Tubular _____. Gravel Packed _____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building _____ Ft. Seepage Tile Field _____
   Cess Pool _____ Sewer (non Cast iron) _____
   Privy _____ Sewer (Cast iron) _____
   Septic Tank _____ Barnyard _____
   Leaching Pit _____ Manure Pile _____
3. Is water from this well to be used for human consumption?
   Yes _____ No _____
4. Date well completed _____
5. Permanent Pump Installed? Yes_____ No_____
   Manufacturer _____ Type _____
   Capacity _____gpm. Depth of setting _____ ft.
6. Well Top Sealed? Yes_____ No_____
7. Pitless Adaptor Installed? Yes_____ No_____
8. Well Disinfected? Yes _____ No _____
9. Water Sample Submitted? Yes_____ No_____

REMARKS:

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. 5158 Year 1968
11. Property owner West Liberty- Dundas Water District Well No. T.H. # 3
    Address Dundas, Illinois 62425
    Driller E. C. Baker & Sons, Inc License No. 92-62
12. Water from Sandstone Formation
    at depth 65.4 to 174.0 ft.
13. County Richland
    Sec. 15 SE
    Twp. 4 N.
    Rng. 10 E.
    Elev. _____
14. Screen: Diam. _____ in.
    Length: _____ ft. Slot _____

SHOW LOCATION IN SECTION PLAT
2540'S
100'E NW/C

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6 1/4"	.188 Wall		
	Black Steel		
	Casing	+ 3.5	65.4

16. Size Hole below casing: 6" in.
17. Static level 22.63 ft. below casing top which is 3.5 ft. above ground level. Pumping level 51.12 ft. when pumping at 9.7 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Clay	14'	14'
Blue Clay	40'	54'
Green Clay	10'	64'
Sandstone	4'	68'
Sandy Lime	5'	73'
Blue Shale	7'	80'
Sandstone with Shale Strips	16'	96'
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

Con't ~~on next page~~

SIGNED A. L. Baker DATE _____

Illinois State Water Survey Pumping Test
July 19, 1968

(Well 1 was more correct)

Blue shale	21	117
Sandstone	45	162
Dirty sandstone with shale strips	12	174

APPENDIX: B1 INVENTORY AND SYNOPSIS OF UNITS West Liberty-Dundas Water District Well 1 (IEPA - 71200)

Classification (CLASSF*) KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 71200
NAME & ADDRESS OF UNIT OWNER: none
DESCRIPTION AND COMMENTS: none
PRE OR POST (Y,N):
DISTANCE AND DIRECTION: none

APPENDIX: B2 WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE West Liberty-Dundas Water District Well 2 (IEPA - 71201)

SURVEYOR: C. Kamp
SURVEY DATE: September 9, 1992

ADDRESS:
Everette Gaede, President
Box 343
West Liberty, IL 62475

AGENCY WELL NO: 71201
WELL NAME & DESC.: Well 2-Located N.W. of WTP
TREATMENT APPLICATION POINT: 02
FACILITY NO. & NAME: 1595050-West Liberty-Dundas Water District
FAC. PHONE NUMBER: None
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
04N, 10E, 16, 1E
DISTANCE FROM CORNER: 2310S, 650W
QUAD SHEET CODE & NAME: 213D-Dundas
MIN. SETBACK: 200 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: G-relatively impermeable bedrock within 20 to 50 ft of surface, overlain by till or other fine-grained materials
AGE OF WELL (DATE WELL CONSTRUCTION): 1969
WELL DEPTH: 168 ft.
CASEMENT DEPTH: 68 ft.
AQUIFER CODE: 2020
MULTIPLE AQUIFER (Y, N): N
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The well site survey area is mostly rural. The survey area is a mixture of row crops, woodland and pasture. The remaining area is low density residential and open space.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:
Cari Sanders, W. Liberty-Dundas Water District, 217 W. Bryan Street, Herrin, IL 62948

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled x. Finished in Drift____. In Rock x.
   Tubular x. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CONCRETE		
CEMENT	+3.8'	-95.1

2. Distance to Nearest:

Building	800 Ft.	Seepage Tile Field	OK
Cess Pool	OK	Sewer (non Cast iron)	OK
Privy	OK	Sewer (Cast iron)	OK
Septic Tank	OK	Barnyard	OK
Leaching Pit	OK	Manure Pile	OK

3. Is water from this well to be used for human consumption?
   Yes x No____
4. Date well completed AUGUST 31, 1970
5. Permanent Pump Installed? Yes x No____
   Manufacturer WESTROL Type SUBMERSIBLE
   Capacity 5 gpm. Depth of setting 84 ft.
6. Well Top Sealed? Yes x No____
7. Pitless Adaptor Installed? Yes x No____
8. Well Disinfected? Yes x No____
9. Water Sample Submitted? Yes x No____

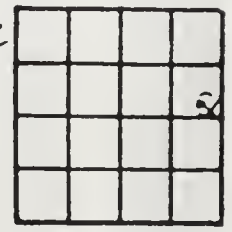
REMARKS:

IDPH 4.065
10/68

GEOLOGICAL AND WATER SURVEYS WELL RECORD

T. H. #-

10. Property owner WEST LIBERTY-DUNDAS PWD Well No. 2
    Address DUNDAS, ILLINOIS 62425
    Driller E. C. BAKER & SONS, INC. License No. 92-62
11. Permit No. 6613 Date DECEMBER 12, 1969
12. Water from SANDSTONE Formation 13. County RICHLAND
    at depth 72 to 165 ft. Sec. 16 NE/C
14. Screen: Diam.____in. Twp. 4N
    Length:____ft. Slot____ Rge. 10E
    Elev.____



SHOW LOCATION IN SECTION PLAT

2310'S 660'W

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
	BLACK STEEL PIPE		
6-1/4"	.188 WALL 15#	+1.0	-67.4
5"	.258 WALL 14#	+1.5	-95.1

16. Size Hole below casing: 6 in.
17. Static level 33 ft. below casing top which is 6.7 ft. above ground level. Pumping level 84.5 ft. when pumping at 42 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
SEE LOGS OF TEST HOLE #4 DATED JANUARY 14, 1969		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED A. L. BAKER DATE AUGUST 1, 1970

NE/C

WELL #2

APPENDIX: B2 INVENTORY AND SYNOPSIS OF UNITS West Liberty-Dundas Water District Well 2 (IEPA - 71201)

Classification (CLASSF*) KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 71201
NAME & ADDRESS OF UNIT OWNER: none
DESCRIPTION AND COMMENTS: none
PRE OR POST (Y,N):
DISTANCE AND DIRECTION: none

APPENDIX: B3 WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE West Liberty-Dundas Water District Well 3 (IEPA - 71202)

SURVEYOR: C. Kamp
SURVEY DATE: September 9, 1992

ADDRESS:
Everette Gaede, President
Box 343
West Liberty, IL 62475

AGENCY WELL NO: 71203
WELL NAME & DESC.: Well 3-Located E. of WTP
TREATMENT APPLICATION POINT: 03
FACILITY NO. & NAME: 1595050-West Liberty-Dundas Water District
FAC. PHONE NUMBER: None
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
04N, 10E, 15, 8E
DISTANCE FROM CORNER: 2590S, 655E
QUAD SHEET CODE & NAME: 213D-Dundas
MIN. SETBACK: 200 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: G-relatively impermeable bedrock within 20 to 50 ft of surface, overlain by till or other fine-grained materials
AGE OF WELL (DATE WELL CONSTRUCTION): 1969
WELL DEPTH: 170 ft.
CASEMENT DEPTH: 58 ft.
AQUIFER CODE: 2020
MULTIPLE AQUIFER (Y, N): N
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The well site survey area is mostly rural. The survey area is a mixture of row crops, woodland and pasture. The remaining area is low density residential and open space.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:
Cari Sanders, W. Liberty-Dundas Water District, 217 W. Bryan Street, Herrin, IL 62948

White Copy –
Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

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ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

TH=170.5

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth 162 ft. finished in 3 depth
      Curb material _____. Buried Slab: Yes_____No_____
   b. Driven _____. Drive Pipe Diam.____in. Depth _____ft.
   c. Drilled _____. Finished in Drift _____. In Rock _____.
      Tubular _____. Gravel Packed _____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building _____ Ft. Seepage Tile Field _____
   Cess Pool _____ Sewer (non Cast iron) _____
   Privy _____ Sewer (Cast iron) _____
   Septic Tank _____ Barnyard _____
   Leaching Pit _____ Manure Pile _____
3. Is water from this well to be used for human consumption?
   Yes _____ No _____
4. Date well completed _____
5. Permanent Pump Installed? Yes_____ No_____
   Manufacturer _____ Type _____
   Capacity _____gpm. Depth of setting _____ ft.
6. Well Top Sealed? Yes_____ No_____
7. Pitless Adaptor Installed? Yes_____ No_____
8. Well Disinfected? Yes _____ No _____
9. Water Sample Submitted? Yes_____ No_____

REMARKS:

IDPH 4.065
10/68

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner West Liberty-Dundas PWD Well No. T. H. # 5
    Address Dundas, Illinois 62425
    Driller E. C. Baker & Sons, Inc License No. 92-62
11. Permit No. 7064 Date March 25, 1969
12. Water from Sandstone (Formation)
    at depth 110 to 162' ft.
13. County Richland
    Sec. 15 SE
    Twp. 4 N.
    Rge. 10 E.
    Elev. _____
14. Screen: Diam. _____ in.
    Length: _____ ft. Slot _____

SHOW LOCATION IN SECTION PLAT
2590'S 655'E of NW/c

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6¼"	6 5/8" OD .188 Wall	above	below
	Black Steel		
	Casing	2.0	58.0

16. Size Hole below casing: 6" in.
17. Static level 24 ft. below casing top which is 2.0 ft. above ground level. Pumping level 105.5 ft. when pumping at 9 gpm for 3.0 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Soil and Clay	5'	5'
Blue Clay	52'	57'
Green Dirty Sandstone	9'	66'
Blue Sandy Shale	21'	87'
Shale and Lime	8'	95'
Sandstone Dirty	15'	110'
Sandstone Clean (Water)	20'	135'
Dirty Sandstone	27'	162'
Shale	9'	170.5'

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED J. C. and A. L. Baker DATE April 1, 1969

Illinois State Water Survey Pumping Test conducted

APPENDIX: B3 INVENTORY AND SYNOPSIS OF UNITS West Liberty-Dundas Water District Well 3 (IEPA - 71202)

Classification (CLASSF*) KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 71202
NAME & ADDRESS OF UNIT OWNER: none
DESCRIPTION AND COMMENTS: none
PRE OR POST (Y,N):
DISTANCE AND DIRECTION: none

APPENDIX: B4 WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE West Liberty-Dundas Water District Well 4 (IEPA - 71203)

SURVEYOR: C. Kamp
SURVEY DATE: September 9, 1992

ADDRESS:
Everette Gaede, President
Box 343
West Liberty, IL 62475

AGENCY WELL NO: 71204
WELL NAME & DESC.: Well 4-Located W. of WTP
TREATMENT APPLICATION POINT: 04
FACILITY NO. & NAME: 1595050-West Liberty-Dundas Water District
FAC. PHONE NUMBER: None
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
04N, 10E, 16, 1E
DISTANCE FROM CORNER: 2600S, 550W
QUAD SHEET CODE & NAME: 213D-Dundas
MIN. SETBACK: 200 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: G-relatively impermeable bedrock within 20 to 50 ft of surface, overlain by till or other fine-grained materials
AGE OF WELL (DATE WELL CONSTRUCTION): 1976
WELL DEPTH: 200 ft.
CASEMENT DEPTH: 104 ft.
AQUIFER CODE: 2020
MULTIPLE AQUIFER (Y, N): N
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The well site survey area is mostly rural. The survey area is a mixture of row crops, woodland and pasture. The remaining area is low density residential and open space.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:
Cari Sanders, W. Liberty-Dundas Water District, 217 W. Bryan Street, Herrin, IL 62948

Kirk Copy – Dept. of Public Health
Yel. Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATI REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth 190 ft.
   Curb material _____. Buried Slab: Yes_____No_____
   b. Driven _____. Drive Pipe Diam. _____in. Depth _____ft.
   c. Drilled __x__. Finished in Drift _____. In Rock __x__.
   Tubular _____. Gravel Packed _____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:

Building	375 Ft.	Seepage Tile Field	OK
Cess Pool	OK	Sewer (non Cast iron)	OK
Privy	OK	Sewer (Cast iron)	OK
Septic Tank	OK	Barnyard	OK
Leaching Pit	OK	Manure Pile	OK

3. Well furnishes water for human consumption? Yes X No_____
4. Date well completed 10-10-77
5. Permanent Pump Installed? Yes X Date _____ No_____
   Manufacturer WESTROL Type SUB Location IN WELL
   Capacity 1½ gpm. Depth of Setting 160 Ft.
6. Well Top Sealed? Yes X No_____ Type _____
7. Pitless Adapter Installed? Yes X No_____
   Manufacturer MONITOR Model Number PS67P8WE0M
   How attached to casing? RUBBER SEAL
8. Well Disinfected? Yes X No_____
9. Pump and Equipment Disinfected? Yes X No_____
10. Pressure Tank Size NO gal. Type NO
    Location _____
11. Water Sample Submitted? Yes_____ No NO

REMARKS:
WATER 104.5' TO 138.0'
WATER 160.0' TO 187.0'
ILLINOIS STATE PUMPING TEST CONDUCTED ON
FEB. 3, 1977

IDPH 4.065
1/74 – KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner ~~PUBLIC WATER DISTRICT~~ WEST LIBERTY-DUNDAS Well No. 4
    Address Box 31, DUNDAS, IL. 62454
    Driller E/ C. BAKER, & SONS. License No. 92-62
11. Permit No. 65474 Date Aug. 18, 1977
12. Water from: SANDSTONE 104.5 to 138.0 Formation
    at depth 160.0 to 187.0 ft.
13. County RICHLAND
    Sec. 16
    Twp. 4N
    Rge. 10E
    Elev. _____
14. Screen: Diam. 4½ in.
    Length: ~~30~~ 160' ft. Slot ½ To 190'
15. Casing and Liner Pipe 2200'S & 550'W of NE/C

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
6" ID	BLACK STEEL		
	#19 SCH 40, .280 WALL	-4.0	-104.5
4½" ID	PVC PLASTIC PIPE	-90'	-190'

SHOW LOCATION IN SECTION PLAT (west Liberty - Dundas area)
~~1741 S. & 1741 W of NE COR. OF SEC~~ QUART.

16. Size Hole below casing: _____ in.
17. * Static level 61.23 ft. below casing top which is 2.0 ft. above ground level. Pumping level 57.19 ft. when pumping at 4.6 gpm for 3.0 hours. *TOP OF PITLESS UNIT

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
CLAY	12	12
SANDY LOOM	3	15
SAND & GRAVEL CLAY	7	22
SOFT GRAY SHALE	33	55
LOOSE SAND	8	63
SOFT SHALE	22	85
GRAY SANDSTON	53	138
SANDY SHALE	22	160
GRAY SANDSTONE	27	187
GRAY SHALE	3	190

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED VERNON A. BAKER DATE Oct. 10, 1977
BEANLAND DRILLING

APPENDIX: B4 INVENTORY AND SYNOPSIS OF UNITS West Liberty-Duncas Water District Well 4 (IEPA - 71203)

Classification (CLASSF*) KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 71203
NAME & ADDRESS OF UNIT OWNER: none
DESCRIPTION AND COMMENTS: none
PRE OR POST (Y,N):
DISTANCE AND DIRECTION: none

CK:mab/31P/sp/1-14

APPENDIX C

FACILITY: 1595050 WEST LIBERTY-DUNDAS WTR DSTRCT

---------- OWNER ---------- ---------- OFFICIAL CUSTODIAN ----------

EVERETTE GAEDE

PRESIDENT

BOX 343

WEST LIBERTY IL 62475

WELL: 71200 WELL #1 STATUS: ACTIVE DRILLED DEPTH(FT): 174
LATITUDE: N38 46 56.5 LONGITUDE: W088 05 37.0 TWP: 04N RNG: 10E SEC: 15 PLOT: 8E

SUSCEPTIBILITY - LAND BURIAL: G SUSCEPTIBILITY - LAND SPREADING: D2 --- MINIMUM SETBACK(FT): 0200 ---
ALTITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN
INTERVAL 1 - TYPE: - N/A SCREEN MATL: - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 2 - TYPE: - N/A SCREEN MATL: - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 2 - TYPE: - N/A SCREEN MATL: - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
AQUIFERS: PENNSYLVANIAN SYSTEM

WELL: 71201 WELL #2 STATUS: ACTIVE DRILLED DEPTH(FT): 168
LATITUDE: N38 46 57.5 LONGITUDE: W088 05 49.0 TWP: 04N RNG: 10E SEC: 16 PLOT: 1E

SUSCEPTIBILITY - LAND BURIAL: G SUSCEPTIBILITY - LAND SPREADING: D2 --- MINIMUM SETBACK(FT): 0200 ---
ALTITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN
INTERVAL 1 - TYPE: - N/A SCREEN MATL: - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 2 - TYPE: - N/A SCREEN MATL: - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 2 - TYPE: - N/A SCREEN MATL: - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
AQUIFERS: PENNSYLVANIAN SYSTEM

WELL: 71202 WELL #3 STATUS: ACTIVE DRILLED DEPTH(FT): 170
LATITUDE: N38 46 56.5 LONGITUDE: W088 05 32.0 TWP: 04N RNG: 10E SEC: 15 PLOT: 8E

SUSCEPTIBILITY - LAND BURIAL: G SUSCEPTIBILITY - LAND SPREADING: D2 --- MINIMUM SETBACK(FT): 0200 ---
ALTITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN
INTERVAL 1 - TYPE: - N/A SCREEN MATL: - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 2 - TYPE: - N/A SCREEN MATL: - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 2 - TYPE: - N/A SCREEN MATL: - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
AQUIFERS: PENNSYLVANIAN SYSTEM

WELL: 71203 WELL 4 STATUS: ACTIVE DRILLED DEPTH(FT): 200
LATITUDE: N38 46 55.0 LONGITUDE: W088 05 47.0 TWP: 04N RNG: 10E SEC: 16 PLOT: 1E

SUSCEPTIBILITY - LAND BURIAL: G SUSCEPTIBILITY - LAND SPREADING: D2 --- MINIMUM SETBACK(FT): 0200 ---
ALTITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN
INTERVAL 1 - TYPE: - N/A SCREEN MATL: - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 2 - TYPE: - N/A SCREEN MATL: - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 2 - TYPE: - N/A SCREEN MATL: - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00

FACILITY: 1595050 WEST LIBERTY-DUNDAS WTR DSTRCT (CONTINUED)

WELL: 71203 WELL 4 (CONTINUED)

AQUIFERS: PENNSYLVANIAN SYSTEM

SUSCEPTIBILITY CODES

LAND BURIAL: G = RELATIVELY IMPERMEABLE BEDROCK WITHIN 20 TO 50 FT OF SURFACE, OVERLAIN BY TILL OR OTHER FINE-GRAINED MATERIALS.

LAND SPREADING: D2 = UNIFORM, RELATIVELY IMPERMEABLE SILTY OR CLAYEY TILL AT LEAST 20 FT THICK; NO EVIDENCE OF INTERBEDDED SAND AND GRAVEL.

APPENDIX D

FACILITY: 1595050 WEST LIBERTY-DUNDAS WTR DSTRCT *** CONTINUED ***

SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 10/87 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
102T000	001	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	MG/L	868.000				
103T000	001	00410	ALKALINITY,TOTAL MG/L AS CACO3	MG/L	502.000				
107T000	001	00951	FLUORIDE,TOTAL MG/L AS F	MG/L	0.610		4.000		
108T000	001	00940	CHLORIDE,TOTAL MG/L AS CL	MG/L	213.000				
109T000	001	00945	SULFATE,TOTAL MG/L AS SO4	MG/L	10.000	<			
110T000	001	00630	NITRATE & NITRITE TOTAL MG/L AS N	MG/L	1.700		10.000		
111T000	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N	MG/L	1.800				
112T000	001	32730	PHENOLS, TOTAL RECOVERABLE UG/L	UG/L	5.000	<			
114T000	001	00956	SILICA,TOTAL MG/L AS SIO2	MG/L	7.900				
115T000	001	00665	PHOSPHORUS, TOTAL MG/L AS P	MG/L	0.310				
116T000	001	00720	CYANIDE,TOTAL MG/L AS CN	MG/L	0.005	<	0.200		
144T000	001	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS	UG/L	20.000		50.000		
151T100	001	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	UG/L	5.000	<	50.000		
153T000	001	71900	MERCURY,TOTAL UG/L AS HG	UG/L	0.050	<	2.000		
155T000	001	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	UG/L	1.000	<	10.000		
177T100	001	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	4.000				
177T100	002	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	2.200				
177T100	003	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP	MG/L	342.000				
177T100	004	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	MG/L	1.200				
177T100	005	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	UG/L	50.000	<			
177T100	006	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	UG/L	73.000		1000.000		
177T100	007	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	UG/L	369.000				
177T100	008	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	UG/L	0.500	<			
177T100	009	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICP	UG/L	3.000	<	10.000		
177T100	010	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICP	UG/L	5.000	<	50.000		
177T100	011	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	UG/L	5.000	<	5000.000		
177T100	012	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	UG/L	5.000	<			
177T100	013	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	UG/L	164.000		1000.000		
177T100	01	3	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	UG/L	5.000	<	150.000		
177T100	015	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	UG/L	6.000				
177T100	016	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	UG/L	3.000	<	50.000		
177T100	017	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	UG/L	148.000				
177T100	018	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	UG/L	5.000	<			
177T100	019	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	UG/L	50.000	<	5000.000		
177T100	020	82394	HARDNESS, CALC - MG/L	MG/L	18.000				
530F000	001	72037	PUMPING RATE GPM	GAL/M	25.000				

SAMPLE NO: 3028445 LOCATION: WELL #1 COLL DATE: 03/07/83 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: LEROY EAGLESON LAB RCVD: 04/14/83 RECEIVED BY:
SMPL PURP: 1-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 03/83 FUND CODE:

FACILITY: 1595050 WEST LIBERTY-DUNDAS WTR DSTRCT STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 01 WELL #1 E SIDE RT 130 200FT ENE WTP STATUS: A
RAW SRCE: 71200 WELL #1 STATUS: A

SAMPLE NO: B71756800 LOCATION: WEST LIBERTY DUNDAS COLL DATE: 10/27/87 DELIVERED BY: UPS
SMPL TYPE: RAW COLLECTOR: W BORING LAB RCVD: 10/30/87 RECEIVED BY: MAD
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 12/28/87 LAB SUPERVISOR: RPF
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 10/87 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
102T000	001	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	MG/L	828.000				
103T000	001	00410	ALKALINITY,TOTAL MG/L AS CACO3	MG/L	506.000				
107T000	001	00951	FLUORIDE,TOTAL MG/L AS F	MG/L	0.610		4.000		
108T000	001	00940	CHLORIDE,TOTAL MG/L AS CL	MG/L	206.000				
109T000	001	00945	SULFATE,TOTAL MG/L AS SO4	MG/L	10.000	<			
110T000	001	00630	NITRATE & NITRITE TOTAL MG/L AS N	MG/L	0.260		10.000		
111T000	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N	MG/L	1.800				
112T000	001	32730	PHENOLS, TOTAL RECOVERABLE UG/L	UG/L	5.000	<			
114T000	001	00956	SILICA,TOTAL MG/L AS S102	MG/L	8.300				
115T000	001	00665	PHOSPHORUS, TOTAL MG/L AS P	MG/L	0.180				
116T000	001	00720	CYANIDE,TOTAL MG/L AS CN	MG/L	0.005	<	0.200		
144T000	001	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS	UG/L	19.000		50.000		
151T100	001	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	UG/L	5.000	<	50.000		
153T000	001	71900	MERCURY,TOTAL UG/L AS HG	UG/L	0.050	<	2.000		
155T000	001	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	UG/L	1.000	<	10.000		
177T100	001	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	4.000				
177T100	002	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	2.200				
177T100	003	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP	MG/L	338.000				
177T100	004	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	MG/L	1.200				
177T100	005	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	UG/L	50.000	<			
177T100	006	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	UG/L	74.000		1000.000		
177T100	007	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	UG/L	367.000				
177T100	008	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	UG/L	0.500	<			
177T100	009	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB	UG/L	3.000	<	10.000		
177T100	010	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB	UG/L	5.000	<	50.000		
177T100	011	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	UG/L	5.000	<	5000.000		
177T100	012	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	UG/L	5.000	<			
177T100	013	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	UG/L	162.000		1000.000		
177T100	014	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	UG/L	5.000	<	150.000		
177T100	015	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	UG/L	6.000				
177T100	016	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	UG/L	3.000	<	50.000		
177T100	017	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	UG/L	149.000				
177T100	018	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	UG/L	5.000	<			
177T100	019	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	UG/L	50.000	<	5000.000		
177T100	020	82394	HARDNESS, CALC - MG/L	MG/L	18.000				
530F000	001	72037	PUMPING RATE GPM	GAL/M	25.000				

SAMPLE NO: B71756900 LOCATION: WEST LIBERTY DUNDAS COLL DATE: 10/27/87 DELIVERED BY: UPS
SMPL TYPE: RAW COLLECTOR: W BORING LAB RCVD: 10/30/87 RECEIVED BY: MAD
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 12/28/87 LAB SUPERVISOR: RPF

FACILITY: 1595050 WEST LIBERTY-DUNDAS WTR DSTRCT *** CONTINUED ***

431A	00	004	32104	BROMOFORM UG/L CG/MS	UG/L	1.000	<	
431A	00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000	<	5.000
431A	00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<	7.000
431A	00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000	<	
431A	00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<	100.000
431A	00	009	77279	1,2-DICHLOROETHANE UG/L	UG/L	1.000	<	5.000
431A	00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000	<	200.000
431A	00	011	32102	CARBON TETRACHLORIDE UG/L CG/MS	UG/L	1.000	<	5.000
431A	00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000	<	5.000
431A	00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<	5.000
431A	00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000	<	100.000
431A	00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000	<	
431A	00	016	78124	BENZENE UG/L	UG/L	1.000	<	5.000
431A	00	017	78131	TOLUENE UG/L	UG/L	1.000	<	1000.000
431A	00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000	<	700.000
431A	00	019	81551	XYLENE UG/L	UG/L	1.000	<	10000.000
5001200		001	72037	PUMPING RATE GPM	GAL/M	25.000		

FACILITY: 1595050 WEST LIBERTY-DUNDAS WTR DSTRCT STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 02 WELL #2 300FT NW WTP STATUS: A
RAW SRCE: 71201 WELL #2 STATUS: A

SAMPLE NO: B028447 LOCATION: WELL #2 COLL DATE: 03/07/83 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: LEROY EAGLESON LAB RCVD: 04/14/83 RECEIVED BY:
SMPL PURP: 1-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 03/83 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LABCUMHOS/CM @ 25 C		1100.000				
		00403	PH LABORATORY UNITS		8.300				
		00410	ALKALINITY,TOTAL MG/L AS CACO3		451.000				
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		2.700				
		00630	NITRATE & NITRITE TOTAL MG/L AS N		0.100	<	10.000		
		00720	CYANIDE,TOTAL MG/L AS CN		0.005	<	0.200		
		00900	HARDNESS,EDTA MG/L AS CACO3		86.000				
		00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		18.000				
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		10.700				
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		236.000				
		00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		1.900				
		00940	CHLORIDE,TOTAL MG/L AS CL		100.000				
		00945	SULFATE,TOTAL MG/L AS SO4		10.000	<			
		00951	FLUORIDE,TOTAL MG/L AS F		0.640		4.000		
		00956	SILICA,TOTAL MG/L AS SIO2		12.000				
		01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		19.000		50.000		
		01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		136.000		1000.000		
		01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500	<			
		01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		280.000				
		01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000	<	10.000		

FACILITY: 1595050 WEST LIBERTY-DUNDAS WTR DSTRCT *** CONTINUED ***

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		1820.000				
		00403	PH LABORATORY UNITS		8.700				
		00410	ALKALINITY,TOTAL MG/L AS CACO3		535.000				
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.420				
		00630	NITRATE & NITRITE TOTAL MG/L AS N		0.100		10.000		
		00720	CYANIDE,TOTAL MG/L AS CN		0.005	<	0.200		
		00900	HARDNESS,EDTA MG/L AS CACO3		10.000	<			
		00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		3.000				
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		1.800				
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		430.000				
		00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		1.900				
		00940	CHLORIDE,TOTAL MG/L AS CL		286.000				
		00945	SULFATE,TOTAL MG/L AS SO4		10.000				
		00951	FLUORIDE,TOTAL MG/L AS F		0.640		4.000		
		00956	SILICA,TOTAL MG/L AS SIO2		7.400				
		01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000	<	50.000		
		01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		67.000		1000.000		
		01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500	<			
		01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		410.000				
		01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		5.000	<	10.000		
		01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000	<	50.000		
		01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000	<			
		01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		3.000	<	5000.000		
		01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		50.000		1000.000		
		01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000		50.000		
		01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		5.000	<	150.000		
		01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		10.000	<			
		01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		5.000	<	50.000		
		01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		126.000				
		01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP		10.000	<			
		01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		29.000		5000.000		
		01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE		1.000	<	10.000		
		70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L		1028.000				
		70304	TOTAL DISSOLVED SOLIDS MG/L BY EC		1090.000				
		71900	MERCURY,TOTAL UG/L AS HG		0.050	<	2.000		

SAMPLE NO: D7603I200 LOCATION: WEST LIBERTY-DUNDAS/WELL 1 COLL DATE: 10/27/87 DELIVERED BY: M B
SMPL TYPE: RAW COLLECTOR: M BORING LAB RCVD: 10/29/87 RECEIVED BY: D V
SMPL PURP: 5-SPEC/OTHR COMMENTS: VOC'S LAB COMPL: 02/11/88 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 10/87 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431A	00 001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000	<			
431A	00 002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000	<			
431A	00 003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000	<			

FACILITY: 1595050 WEST LIBERTY-DUNDAS WTR DSTRCT *** CONTINUED ***

01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB	5.000 <	50.000	
01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	5.000 <		
01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	3.000 <	5000.000	
01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	40.000	1000.000	
01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	5.000 <	50.000	
01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	5.000 <	150.000	
01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	3.000 <		
01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	7.000	50.000	
01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	198.000		
01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	4.000 <		
01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	2.000 <	5000.000	
01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	1.000 <	10.000	
70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	671.000		
70304	TOTAL DISSOLVED SOLIDS MG/L BY EC	660.000		
71900	MERCURY,TOTAL UG/L AS HG	0.050 <	2.000	

FACILITY: 1595050 WEST LIBERTY-DUNDAS WTR DSTRCT STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 03 WELL #3 800FT E WTP (E SIDE RT 130) STATUS: A
RAW SRCE: 71202 WELL #3 STATUS: A

SAMPLE NO: B028432 LOCATION: WELL #3 COLL DATE: 03/07/83 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: LEROY EAGLESON LAB RCVD: 04/14/83 RECEIVED BY:
SMPL PURP: 1-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 03/83 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LABCUMHOS/CM @ 25 C		1810.000			
		00403	PH LABORATORY UNITS		8.700			
		00410	ALKALINITY,TOTAL MG/L AS CACO3		460.000			
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.340			
		00630	NITRATE & NITRITE TOTAL MG/L AS N		0.100 <	10.000		
		00720	CYANIDE,TOTAL MG/L AS CN		0.005 <	0.200		
		00900	HARDNESS,EDTA MG/L AS CACO3		10.000 <			
		00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		2.000			
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		0.700			
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		404.000			
		00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		1.700			
		00940	CHLORIDE,TOTAL MG/L AS CL		278.000			
		00945	SULFATE,TOTAL MG/L AS SO4		12.000			
		00951	FLUORIDE,TOTAL MG/L AS F		0.590	4.000		
		00956	SILICA,TOTAL MG/L AS SIO2		7.000			
		01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000	50.000		
		01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		61.000	1000.000		
		01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500 <			
		01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		370.000			
		01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		10.000 <	10.000		
		01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000 <	50.000		
		01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000 <			

FACILITY: 1595050 WEST LIBERTY-DUNDAS WTR DSTRCT *** CONTINUED ***

01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	3.000	<	5000.000
01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	30.000		1000.000
01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	5.000	<	50.000
01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	5.000	<	150.000
01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	10.000	<	
01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	5.000	<	50.000
01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	93.000		
01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	4.000	<	
01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	3.000		5000.000
01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	1.000		10.000
70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	1056.000		
70304	TOTAL DISSOLVED SOLIDS MG/L BY EC	1090.000		
71900	MERCURY,TOTAL UG/L AS HG	0.110		2.000

FACILITY: 1595050 WEST LIBERTY-DUNDAS WTR DSTRCT STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 04 WELL #4 400FT NW WTP (W SIDE RT 130) STATUS: A
RAW SRCE: 71203 WELL 4 STATUS: A

SAMPLE NO: B028436 LOCATION: WELL #4 COLL DATE: 03/07/83 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: LEROY EAGLESON LAB RCVD: 04/14/83 RECEIVED BY:
SMPL PURP: 1-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 03/83 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		1010.000				
		00403	PH LABORATORY UNITS		8.200				
		00410	ALKALINITY,TOTAL MG/L AS CACO3		446.000				
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		3.000				
		00630	NITRATE & NITRITE TOTAL MG/L AS N		0.100	<	10.000		
		00720	CYANIDE,TOTAL MG/L AS CN		0.005	<	0.200		
		00900	HARDNESS,EDTA MG/L AS CACO3		85.000				
		00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		20.000				
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		13.000				
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		197.000				
		00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		2.100				
		00940	CHLORIDE,TOTAL MG/L AS CL		58.000				
		00945	SULFATE,TOTAL MG/L AS SO4		10.000	<			
		00951	FLUORIDE,TOTAL MG/L AS F		0.660		4.000		
		00956	SILICA,TOTAL MG/L AS SIO2		11.000				
		01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		62.000		50.000*		
		01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		137.000		1000.000		
		01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500	<			
		01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		250.000				
		01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000	<	10.000		
		01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000	<	50.000		
		01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000	<			
		01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		3.000	<	5000.000		
		01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		90.000		1000.000		

FACILITY: 1595050 WEST LIBERTY-DUNDAS WTR DSTRCT *** CONTINUED ***

01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	5.000	<	50.000
01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	10.000		150.000
01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	3.000	<	
01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	5.000	<	50.000
01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	237.000		
01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	4.000	<	
01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	2.000	<	5000.000
01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	1.000		10.000
70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	561.000		
70304	TOTAL DISSOLVED SOLIDS MG/L BY EC	510.000		
71900	MERCURY,TOTAL UG/L AS HG	0.050		2.000

APPENDIX E

HAZARD REVIEW WORKSHEET

1. Unique I.D. Number 7 1 2 0 0 - 7 1 2 0 3 , Distance and Direction from the Wellhead: none

2. Nature of Business: none

3. DLPC Permit Number(s) and Description (e.g., RCRA, Generic, Solid Waste, UIC, etc.): none

4. DAPC Permit Number(s) and Description: none

5. DWPC Permit Numbers and Description (e.g., NPDES, Industrial Pre-Treatment, Sewer Plans, etc.): none

6. ERU Incidents and Description: none

7. ERU 313 Reports and Description: none

8. ESDA 302/303 Reports and Description: none

9. ESDA 311/312 Reports and Description: none

10. PWS compliance monitoring conducted and describe the results (e.g., VOC/VOA sample detects, etc.):

    none

11. ISFM list the underground storage tanks registered, provide the owner name and address:

Owner Name	Address

    none observed

12. Is the site sewered or non-sewered?

    If the site is not sewered, describe:

13. Has on-site <u>past</u> or <u>present</u> landfilling, land treating, or surface impoundment of waste, other than landscape waste or construction and demolition debris occurred?

    [ ] Yes. If yes, describe:

    [X] No.

14. Are there currently any on-site piles of special or hazardous waste?

[ ] Yes. If yes, describe:

[X] No.

15. Are on-site piles of waste (other than special or hazardous wastes) managed according to Agency guidelines?

N/A
[ ] Yes.

[ ] No. If no, describe:

16. Are there currently any underground storage tanks present on-site, and will any underground tanks be installed in the future?

[ ] Yes. If yes, describe:

[X] No.

17(a). Has any situation(s) occurred at this site which resulted in a "release" of any hazardous substance or petroleum?

[ ] Yes (continue to next question)
[X] No (stop here)

(b). Have any hazardous substances or petroleum, which were released, come into contact with the ground surface at this site? (Note--do not automatically exclude paved or otherwise covered areas that may still have allowed chemical substances to penetrate into the ground.)

[ ] Yes (continue to next question)
[ ] No (stop here)

(c). Have any of the following actions/events been associated with the release(s) referred to in question 17(b)?

[ ] Hiring of a cleanup contractor to remove obviously contaminated materials including subsoils

[ ] Replacement or major repair of damaged facilities

[ ] Assignment of in-house maintenance staff to remove obviously contaminated materials including subsoils

[ ] Designation, by IEPA or the ESDA, of a release as "significant" under the Illinois Chemical Safety Act

[ ] Reordering or other replenishment of inventory due to the amount of substance lost

[ ] Temporary or more long-term monitoring of groundwater at or near the site

[ ] Stop usage of an on-site or nearby water well because of offensive characteristics of the water

[ ] Coping with fumes from subsurface storm drains or inside basements

[ ] Signs of substances leaching out of the ground along the base of slopes or at other low points on or adjacent to the site

(d). The on-site release(s) may have been of sufficient magnitude to contaminate groundwaters. Summarize the problem.

18. Are there more than 100 gallons of either pesticides or organic solvents, or 10,000 gallons of any hazardous substance, or 30,000 gallons of petroleum present at any time?

[ ] Yes. If yes, describe:

[X] No.

19. Do any of the regulated entities have groundwater monitoring systems, and have any exceeded compliance requirements?

[ ] Yes. If yes, describe:

[X] No.

20. After considering all of the above criteria does this site potentially pose a hazard to groundwater?

[ ] Yes. If yes, describe:

[X] No.

CK:mab/31P/sp/15-17

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